IN THE CLAIMS

Claim 1 (**currently amended**). Process for preparing an oxidant for the preparation of conductive polymers, ~~**characterized in that**~~ **wherein** a metal salt of an organic acid or an inorganic acid having organic radicals is treated with an ion exchanger.

Claim 2 **(currently amended).** Process for preparing an oxidant according to Claim 1, ~~**characterized in that**~~ **wherein** the ion exchanger used is an anion exchanger.

Claim 3 **(currently amended).** Process for preparing an oxidant according to Claim ~~**1 or**~~ 2, ~~**characterized in that**~~ **wherein** the ion exchanger used is a weakly basic anion exchanger.

Claim 4 **(currently amended).** Process for preparing an oxidant according to ~~**at least one of Claims 1 to 3, characterized in that**~~ **claim 1, wherein** the metal salt is a transition metal salt.

Claim 5 **(currently amended).** Process for preparing an oxidant according to Claim 4, ~~**characterized in that**~~ **wherein** the transition metal salt is an iron(III) salt.

Claim 6 **(currently amended).** Process for preparing an oxidant according to ~~**at least one of Claims 1 to 5, characterized in that**~~ **claim 1, wherein** the radical of the organic acid is a radical of a sulphonic acid.

Claim 7 **(currently amended).** Process for preparing an oxidant according to ~~**at least one of Claims 1 to 6, characterized in that**~~ **claim 5, wherein** the transition metal salt is Fe(III) p-toluenesulphonate, Fe(III) o-toluenesulphonate or a mixture of Fe(III) p-toluenesulphonate and Fe(III) o-toluenesulphonate.

Claim 8 **(currently amended).** Process for preparing an oxidant according to ~~**at least one of Claims 1 to 7, characterized in that**~~ **claim 1, wherein** the process is carried out in the presence of one or more solvent(s).

Claim 9 **(currently amended).** Process for preparing an oxidant according to ~~**at least one of Claims 1 to 8, characterized in that**~~ **claim 8, wherein** the solvent or

solvents used is/are one or more alcohol(s), water or a mixture of one or more alcohol(s) and water.

Claim 10 **(currently amended).** Process for preparing an oxidant according to ~~at least one of Claims 1 to 9, characterized in that the~~ claim 9, wherein said alcohol(s) is/are butanol, ethanol or methanol.

Claim 11 **(currently amended).** Process for preparing an oxidant according to ~~at least one of Claims 1 to 10, characterized in that~~ claim 8, wherein the oxidant is separated from the solvent after treatment with the ion exchanger and ~~is, if desired,~~ optionally is redissolved in the same solvent or another solvent.

Claim 12 **(currently amended).** Oxidant ~~obtainable by a~~ prepared by the process ~~according to at least one of Claims 1 to 11~~ of claim 1.

Claim 13 **(currently amended).** Oxidant according to Claim 12, ~~characterized in that it~~ wherein said oxidant is present in solution and the solution has a water content of from 0 to 10% by weight based on the total weight of the solution.

Claim 14 **(currently amended).** ~~Use of the oxidants according to Claim 12 or 13, as retarding oxidants in the~~ A process for the oxidative polymerization of precursors for the preparation of conductive polymers **wherein said process is carried out with an oxidant of claim 12 as a retarding oxidant**.

Claim 15 **(currently amended).** Mixture comprising precursors for the preparation of conductive polymers and one or more oxidants ~~according to the~~ of Claim 12 ~~or 13~~ and, ~~if desired~~ optionally, one or more solvents, ~~characterized in that~~ wherein the formation of polymers in the mixtures is delayed.

Claim 16 **(currently amended).** Mixture according to Claim 15, ~~characterized in that~~ wherein substituted or unsubstituted 3,4-ethylenedioxythiophene or derivatives thereof is/are used as said precursors for the preparation of conductive polymers.

Claim 17 **(currently amended).** Mixture according to Claim 15, ~~or 16, characterized in that it contains~~ **further comprising** water.

Claim 18 **(currently amended).** Mixture according to ~~at least one of Claims 15 to 17, characterized in that it contains~~ **claim 15, further comprising** counterions.

Claim 19 **(currently amended).** Mixture according to ~~at least one of Claims 15 to 18, characterized in that it contains~~ **claim 15, further comprising** one or more binders, crosslinkers and/or additives.

Claim 20 **(currently amended).** Mixture comprising precursors for the preparation of conductive polymers and at least one oxidant, ~~characterized in that the polymerization of~~ **wherein** the precursors ~~has~~ **have** an activation energy of 75 kJ/mol or more.

Claim 21 **(currently amended).** Mixture according to Claim 20, **wherein said precursors** comprise ~~characterized in that it contains~~ substituted or unsubstituted 3,4-ethylenedioxythiophene or derivatives thereof ~~as precursors for the preparation of conductive polymers~~.

Claim 22 **(currently amended).** Mixture according to Claim 20, ~~or 21, characterized in that it contains~~ **further comprising** a transition metal salt~~, preferably an iron(III) salt,~~ as oxidant.

Claim 23 **(currently amended).** Process for producing an electrolytic capacitor, ~~characterized in that~~ **wherein** a mixture according to ~~at least one of Claims 15 to 22, if appropriate~~ **claim 15, optionally** in the form of ~~solutions, are~~ **a solution, is** applied to an oxide layer of a metal and ~~are~~ **is** polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 24 **(currently amended).** Process for producing an electrolytic capacitor, ~~characterized in that~~ **wherein** precursors for the preparation of conductive polymers and oxidants according to Claim 12 ~~or 13~~ are applied successively, ~~if appropriate~~ **optionally** in the form of solutions, to an oxide layer of a metal and

are polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 25 **(currently amended).** Process according to Claim 23 ~~**or 24, characterized in that**~~ **wherein** the oxidizable metal is a valve metal or a compound having comparable properties.

Claim 26 **(currently amended).** Process according to ~~**at least one of Claims 23 to 25, characterized in that**~~ **claim 25, wherein** the valve metal or the compound having comparable properties is **selected from the group consisting of** tantalum, niobium, aluminium, titanium, zirconium, hafnium, vanadium, an alloy or compound of at least one of these metals with other elements~~,~~ **and** NbO or an alloy or compound of NbO with other elements.

Claim 27 **(currently amended).** Process for producing conductive layers, ~~**characterized in that**~~ **wherein** a mixture according to ~~**at least one of Claims 15 to 22**~~ **claim 15** is applied, ~~**if appropriate**~~ **optionally** in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 28 **(currently amended).** Process for producing conductive layers, ~~**characterized in that**~~ **wherein** precursors for the preparation of conductive polymers and oxidants as claimed in Claim 12 ~~**or 13**~~ are applied successively, ~~**if appropriate**~~ **optionally** in the form of solutions, to a substrate and are polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 29 **(currently amended).** Process according to Claim 23, ~~**and 28, characterized in that**~~ **wherein** counterions are added to the solutions.

Claim 30 **(currently amended).** Process according to ~~**at least one of Claims 23 to 29, characterized in that**~~ **claim 23, wherein said precursors are selected from the group consisting of** substituted or unsubstituted thiophenes, pyrroles,

anilines ~~**or**~~ **and** derivatives thereof ~~**are used as precursors for the preparation of conductive polymers**~~.

Claim 31 **(currently amended).** Process according to Claim 30, ~~**characterized in that**~~ **wherein** the substituted or unsubstituted thiophenes or derivatives thereof which are used are substituted or unsubstituted alkylene-3,4-dioxythiophenes or derivatives thereof.

Claim 32 **(currently amended).** Process according to Claim 31, wherein the substituted or unsubstituted alkylene-3,4-dioxythiopene ~~**used**~~ is 3,4-ethylenedioxythiophene.

Claim 33 **(currently amended).** Process according to ~~**at least one of Claims 23 to 32, characterized in that**~~ **claim 23, wherein** the solutions ~~**additionally contain**~~ **further comprise** one or more binders, crosslinkers and/or additives.

Claim 34 **(currently amended).** Process according to ~~**at least one of Claims 23 to 33, characterized in that**~~ **claim 23, wherein** the counterions are anions of monomeric or polymeric alkanesulphonic or cycloalkanesulphonic acids or aromatic sulphonic acids.

Claim 35 **(currently amended).** Process according to ~~**at least one of Claims 23 to 34, characterized in that**~~ **claim 23, wherein** the layer comprising the polymers (electrolyte layer) is washed with suitable solvents after the polymerization and, ~~**if appropriate**~~ **optionally**, after drying to remove excess oxidant and residual salts.

Claim 36 (cancelled).

Claim 37 (cancelled).

Claim 38 (new). Mixture according to Claim 21, further comprising a transition metal salt as oxidant.

Claim 39 (new). Mixture according to Claim 22 wherein said transition metal salt is an iron(III) salt.

Claim 40 (new). Mixture according to Claim 38 wherein said transition metal salt is an iron(III) salt.

Claim 41 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 16, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 42 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 17, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 43 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 18, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 44 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 19, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 45 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 20, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 46 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 21, optionally in the form of a solution, is applied to an oxide layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 47 (new). Process for producing an electrolytic capacitor, wherein a mixture according to claim 22, optionally in the form of a solution, is applied to an oxide

layer of a metal and is polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 48 (new). Process for producing an electrolytic capacitor, wherein precursors for the preparation of conductive polymers and oxidants according to Claim 13 are applied successively, optionally in the form of solutions, to an oxide layer of a metal and are polymerized by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding polymers.

Claim 49 (new). Process according to Claim 24 wherein the oxidizable metal is a valve metal or a compound having comparable properties.

Claim 50 (new). Process according to claim 49, wherein the valve metal or the compound having comparable properties is selected from the group consisting of tantalum, niobium, aluminium, titanium, zirconium, hafnium, vanadium, an alloy or compound of at least one of these metals with other elements~~,~~ and NbO or an alloy or compound of NbO with other elements.

Claim 51 (new). Process for producing conductive layers, wherein a mixture according to claim 16 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 52 (new). Process for producing conductive layers, wherein a mixture according to claim 17 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 53 (new). Process for producing conductive layers, wherein a mixture according to claim 18 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 54 (new). Process for producing conductive layers, wherein a mixture according to claim 19 is applied, optionally in the form of solutions, to a substrate

and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 55 (new). Process for producing conductive layers, wherein a mixture according to claim 20 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 56 (new). Process for producing conductive layers, wherein a mixture according to claim 21 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 57 (new). Process for producing conductive layers, wherein a mixture according to claim 22 is applied, optionally in the form of solutions, to a substrate and is polymerized on this substrate by chemical oxidation at temperatures of from –10°C to 250°C to form the corresponding conductive polymers.

Claim 58 (new). Process according to Claim 28 wherein counterions are added to the solutions.

Claim 59 (new). Process according to claim 24, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 60 (new) Process according to claim 25, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 61 (new) Process according to claim 26, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 62 (new) Process according to claim 27, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 63 (new) Process according to claim 28, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 64 (new) Process according to claim 29, wherein said precursors are selected from the group consisting of substituted or unsubstituted thiophenes, pyrroles, anilines and derivatives thereof.

Claim 65 (new). Process according to claim 24, wherein the solutions further comprise one or more binders, crosslinkers and/or additives.

Claim 66 (new). Process according to claim 27, wherein the solutions further comprise one or more binders, crosslinkers and/or additives.

Claim 67 (new). Process according to claim 28, wherein the solutions further comprise one or more binders, crosslinkers and/or additives.

Claim 68 (new). Process according to claim 24, wherein the counterions are anions of monomeric or polymeric alkanesulphonic or cycloalkanesulphonic acids or aromatic sulphonic acids.

Claim 69 (new). Process according to claim 26, wherein the counterions are anions of monomeric or polymeric alkanesulphonic or cycloalkanesulphonic acids or aromatic sulphonic acids.

Claim 70 (new). Process according to claim 27, wherein the counterions are anions of monomeric or polymeric alkanesulphonic or cycloalkanesulphonic acids or aromatic sulphonic acids.

Claim 71 (new). Process according to claim 28, wherein the counterions are anions of monomeric or polymeric alkanesulphonic or cycloalkanesulphonic acids or aromatic sulphonic acids.

Claim 72. Process according to claim 24, wherein the layer comprising the polymers (electrolyte layer) is washed with suitable solvents after the polymerization and, optionally, after drying to remove excess oxidant and residual salts.

Claim 73. Process according to claim 26, wherein the layer comprising the polymers (electrolyte layer) is washed with suitable solvents after the polymerization and, optionally, after drying to remove excess oxidant and residual salts.

Claim 74. Process according to claim 27, wherein the layer comprising the polymers (electrolyte layer) is washed with suitable solvents after the polymerization and, optionally, after drying to remove excess oxidant and residual salts.

Claim 75. Process according to claim 28, wherein the layer comprising the polymers (electrolyte layer) is washed with suitable solvents after the polymerization and, optionally, after drying to remove excess oxidant and residual salts.